



SequenceListing ST25.txt  
SEQUENCE LISTING

<110> Aarhus University

<120> Modulation of activity of neurotrophins

<130> P700PC00

<160> 13

<170> PatentIn version 3.1

<210> 1

<211> 831

<212> PRT

<213> Homo sapiens

<400> 1

Met Glu Arg Pro Trp Gly Ala Ala Asp Gly Leu Ser Arg Trp Pro His  
1 5 10 15

Gly Leu Gly Leu Leu Leu Leu Gln Leu Leu Pro Pro Ser Thr Leu  
20 25 30

Ser Gln Asp Arg Leu Asp Ala Pro Pro Pro Pro Ala Ala Pro Leu Pro  
35 40 45

Arg Trp Ser Gly Pro Ile Gly Val Ser Trp Gly Leu Arg Ala Ala Ala  
50 55 60

Ala Gly Gly Ala Phe Pro Arg Gly Gly Arg Trp Arg Arg Ser Ala Pro  
65 70 75 80

Gly Glu Asp Glu Glu Cys Gly Arg Val Arg Asp Phe Val Ala Lys Leu  
85 90 95

Ala Asn Asn Thr His Gln His Val Phe Asp Asp Leu Arg Gly Ser Val  
100 105 110

^ Ser Leu Ser Trp Val Gly Asp Ser Thr Gly Val Ile Leu Val Leu Thr  
115 120 125

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Thr Phe His Val Pro Leu Val Ile Met Thr Phe Gly Gln Ser Lys Leu  
130 135 140

Tyr Arg Ser Glu Asp Tyr Gly Lys Asn Phe Lys Asp Ile Thr Asp Leu  
145 150 155 160

Ile Asn Asn Thr Phe Ile Arg Thr Glu Phe Gly Met Ala Ile Gly Pro  
165 170 175

Glu Asn Ser Gly Lys Val Val Leu Thr Ala Glu Val Ser Gly Gly Ser  
180 185 190

Arg Gly Gly Arg Ile Phe Arg Ser Ser Asp Phe Ala Lys Asn Phe Val  
195 200 205

Gln Thr Asp Leu Pro Phe His Pro Leu Thr Gln Met Met Tyr Ser Pro  
210 215 220

Gln Asn Ser Asp Tyr Leu Leu Ala Leu Ser Thr Glu Asn Gly Leu Trp  
225 230 235 240

Val Ser Lys Asn Phe Gly Gly Lys Trp Glu Glu Ile His Lys Ala Val  
245 250 255

Cys Leu Ala Lys Trp Gly Ser Asp Asn Thr Ile Phe Phe Thr Thr Tyr  
260 265 270

Ala Asn Gly Ser Cys Lys Ala Asp Leu Gly Ala Leu Glu Leu Trp Arg  
275 280 285

Thr Ser Asp Leu Gly Lys Ser Phe Lys Thr Ile Gly Val Lys Ile Tyr  
290 295 300

Ser Phe Gly Leu Gly Gly Arg Phe Leu Phe Ala Ser Val Met Ala Asp  
305 310 315 320

Lys Asp Thr Thr Arg Arg Ile His Val Ser Thr Asp Gln Gly Asp Thr  
325 330 335

Trp Ser Met Ala Gln Leu Pro Ser Val Gly Gln Glu Gln Phe Tyr Ser  
340 345 350

Ile Leu Ala Ala Asn Asp Asp Met Val Phe Met His Val Asp Glu Pro  
355 360 365

Gly Asp Thr Gly Phe Gly Thr Ile Phe Thr Ser Asp Asp Arg Gly Ile  
370 375 380

Val Tyr Ser Lys Ser Leu Asp Arg His Leu Tyr Thr Thr Thr Gly Gly  
385 390 395 400

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Glu Thr Asp Phe Thr Asn Val Thr Ser Leu Arg Gly Val Tyr Ile Thr  
405 410 415

Ser Val Leu Ser Glu Asp Asn Ser Ile Gln Thr Met Ile Thr Phe Asp  
420 425 430

Gln Gly Gly Arg Trp Thr His Leu Arg Lys Pro Glu Asn Ser Glu Cys  
435 440 445

Asp Ala Thr Ala Lys Asn Lys Asn Glu Cys Ser Leu His Ile His Ala  
450 455 460

Ser Tyr Ser Ile Ser Gln Lys Leu Asn Val Pro Met Ala Pro Leu Ser  
465 470 475 480

Glu Pro Asn Ala Val Gly Ile Val Ile Ala His Gly Ser Val Gly Asp  
485 490 495

Ala Ile Ser Val Met Val Pro Asp Val Tyr Ile Ser Asp Asp Gly Gly  
500 505 510

Tyr Ser Trp Thr Lys Met Leu Glu Gly Pro His Tyr Tyr Thr Ile Leu  
515 520 525

Asp Ser Gly Gly Ile Ile Val Ala Ile Glu His Ser Ser Arg Pro Ile  
530 535 540

Asn Val Ile Lys Phe Ser Thr Asp Glu Gly Gln Cys Trp Gln Thr Tyr  
545 550 555 560

Thr Phe Thr Arg Asp Pro Ile Tyr Phe Thr Gly Leu Ala Ser Glu Pro  
565 570 575

Gly Ala Arg Ser Met Asn Ile Ser Ile Trp Gly Phe Thr Glu Ser Phe  
580 585 590

Leu Thr Ser Gln Trp Val Ser Tyr Thr Ile Asp Phe Lys Asp Ile Leu  
595 600 605

Glu Arg Asn Cys Glu Glu Lys Asp Tyr Thr Ile Trp Leu Ala His Ser  
610 615 620

Thr Asp Pro Glu Asp Tyr Glu Asp Gly Cys Ile Leu Gly Tyr Lys Glu  
625 630 635 640

Gln Phe Leu Arg Leu Arg Lys Ser Ser Met Cys Gln Asn Gly Arg Asp  
645 650 655

Tyr Val Val Thr Lys Gln Pro Ser Ile Cys Leu Cys Ser Leu Glu Asp  
660 665 670

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Phe Leu Cys Asp Phe Gly Tyr Tyr Arg Pro Glu Asn Asp Ser Lys Cys  
675 680 685

Val Glu Gln Pro Glu Leu Lys Gly His Asp Leu Glu Phe Cys Leu Tyr  
690 695 700

Gly Arg Glu Glu His Leu Thr Thr Asn Gly Tyr Arg Lys Ile Pro Gly  
705 710 715 720

Asp Lys Cys Gln Gly Gly Val Asn Pro Val Arg Glu Val Lys Asp Leu  
725 730 735

Lys Lys Lys Cys Thr Ser Asn Phe Leu Ser Pro Glu Lys Gln Asn Ser  
740 745 750

Lys Ser Asn Ser Val Pro Ile Ile Leu Ala Ile Val Gly Leu Met Leu  
755 760 765

Val Thr Val Val Ala Gly Val Leu Ile Val Lys Lys Tyr Val Cys Gly  
770 775 780

Gly Arg Phe Leu Val His Arg Tyr Ser Val Leu Gln Gln His Ala Glu  
785 790 795 800

Ala Asn Gly Val Asp Gly Val Asp Ala Leu Asp Thr Ala Ser His Thr  
805 810 815

Asn Lys Ser Gly Tyr His Asp Asp Ser Asp Glu Asp Leu Leu Glu  
820 825 830

<210> 2

<211> 2214

<212> PRT

<213> Homo sapiens

<400> 2

Met Ala Thr Arg Ser Ser Arg Arg Glu Ser Arg Leu Pro Phe Leu Phe  
1 5 10 15

Thr Leu Val Ala Leu Leu Pro Pro Gly Ala Leu Cys Glu Val Trp Thr  
20 25 30

Gln Arg Leu His Gly Gly Ser Ala Pro Leu Pro Gln Asp Arg Gly Phe  
35 40 45

Leu Val Val Gln Gly Asp Pro Arg Glu Leu Arg Leu Trp Ala Arg Gly  
50 55 60

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Asp Ala Arg Gly Ala Ser Arg Ala Asp Glu Lys Pro Leu Arg Arg Lys  
65 70 75 80

Arg Ser Ala Ala Leu Gln Pro Glu Pro Ile Lys Val Tyr Gly Gln Val  
85 90 95

Ser Leu Asn Asp Ser His Asn Gln Met Val Val His Trp Ala Gly Glu  
100 105 110

Lys Ser Asn Val Ile Val Ala Leu Ala Arg Asp Ser Leu Ala Leu Ala  
115 120 125

Arg Pro Lys Ser Ser Asp Val Tyr Val Ser Tyr Asp Tyr Gly Lys Ser  
130 135 140

Phe Lys Lys Ile Ser Asp Lys Leu Asn Phe Gly Leu Gly Asn Arg Ser  
145 150 155 160

Glu Ala Val Ile Ala Gln Phe Tyr His Ser Pro Ala Asp Asn Lys Arg  
165 170 175

Tyr Ile Phe Ala Asp Ala Tyr Ala Gln Tyr Leu Trp Ile Thr Phe Asp  
180 185 190

Phe Cys Asn Thr Leu Gln Gly Phe Ser Ile Pro Phe Arg Ala Ala Asp  
195 200 205

Leu Leu Leu His Ser Lys Ala Ser Asn Leu Leu Leu Gly Phe Asp Arg  
210 215 220

Ser His Pro Asn Lys Gln Leu Trp Lys Ser Asp Asp Phe Gly Gln Thr  
225 230 235 240

Trp Ile Met Ile Gln Glu His Val Lys Ser Phe Ser Trp Gly Ile Asp  
245 250 255

Pro Tyr Asp Lys Pro Asn Thr Ile Tyr Ile Glu Arg His Glu Pro Ser  
260 265 270

Gly Tyr Ser Thr Val Phe Arg Ser Thr Asp Phe Phe Gln Ser Arg Glu  
275 280 285

Asn Gln Glu Val Ile Leu Glu Glu Val Arg Asp Phe Gln Leu Arg Asp  
290 295 300

Lys Tyr Met Phe Ala Thr Lys Val Val His Leu Leu Gly Ser Glu Gln  
305 310 315 320

Gln Ser Ser Val Gln Leu Trp Val Ser Phe Gly Arg Lys Pro Met Arg  
325 330 335

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Ala Ala Gln Phe Val Thr Arg His Pro Ile Asn Glu Tyr Tyr Ile Ala  
340 345 350

Asp Ala Ser Glu Asp Gln Val Phe Val Cys Val Ser His Ser Asn Asn  
355 360 365

Arg Thr Asn Leu Tyr Ile Ser Glu Ala Glu Gly Leu Lys Phe Ser Leu  
370 375 380

Ser Leu Glu Asn Val Leu Tyr Tyr Ser Pro Gly Gly Ala Gly Ser Asp  
385 390 395 400

Thr Leu Val Arg Tyr Phe Ala Asn Glu Pro Phe Ala Asp Phe His Arg  
405 410 415

Val Glu Gly Leu Gln Gly Val Tyr Ile Ala Thr Leu Ile Asn Gly Ser  
420 425 430

Met Asn Glu Glu Asn Met Arg Ser Val Ile Thr Phe Asp Lys Gly Gly  
435 440 445

Thr Trp Glu Phe Leu Gln Ala Pro Ala Phe Thr Gly Tyr Gly Glu Lys  
450 455 460

Ile Asn Cys Glu Leu Ser Gln Gly Cys Ser Leu His Leu Ala Gln Arg  
465 470 475 480

Leu Ser Gln Leu Leu Asn Leu Gln Leu Arg Arg Met Pro Ile Leu Ser  
485 490 495

Lys Glu Ser Ala Pro Gly Leu Ile Ile Ala Thr Gly Ser Val Gly Lys  
500 505 510

Asn Leu Ala Ser Lys Thr Asn Val Tyr Ile Ser Ser Ser Ala Gly Ala  
515 520 525

Arg Trp Arg Glu Ala Leu Pro Gly Pro His Tyr Tyr Thr Trp Gly Asp  
530 535 540

His Gly Gly Ile Ile Thr Ala Ile Ala Gln Gly Met Glu Thr Asn Glu  
545 550 555 560

Leu Lys Tyr Ser Thr Asn Glu Gly Glu Thr Trp Lys Thr Phe Ile Phe  
565 570 575

Ser Glu Lys Pro Val Phe Val Tyr Gly Leu Leu Thr Glu Pro Gly Glu  
580 585 590

Lys Ser Thr Val Phe Thr Ile Phe Gly Ser Asn Lys Glu Asn Val His  
595 600 605

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Ser Trp Leu Ile Leu Gln Val Asn Ala Thr Asp Ala Leu Gly Val Pro  
610 615 620

Cys Thr Glu Asn Asp Tyr Lys Leu Trp Ser Pro Ser Asp Glu Arg Gly  
625 630 635 640

Asn Glu Cys Leu Leu Gly His Lys Thr Val Phe Lys Arg Arg Thr Pro  
645 650 655

His Ala Thr Cys Phe Asn Gly Glu Asp Phe Asp Arg Pro Val Val Val  
660 665 670

Ser Asn Cys Ser Cys Thr Arg Glu Asp Tyr Glu Cys Asp Phe Gly Phe  
675 680 685

Lys Met Ser Glu Asp Leu Ser Leu Glu Val Cys Val Pro Asp Pro Glu  
690 695 700

Phe Ser Gly Lys Ser Tyr Ser Pro Pro Val Pro Cys Pro Val Gly Ser  
705 710 715 720

Thr Tyr Arg Arg Thr Arg Gly Tyr Arg Lys Ile Ser Gly Asp Thr Cys  
725 730 735

Ser Gly Gly Asp Val Glu Ala Arg Leu Glu Gly Glu Leu Val Pro Cys  
740 745 750

Pro Leu Ala Glu Glu Asn Glu Phe Ile Leu Tyr Ala Val Arg Lys Ser  
755 760 765

Ile Tyr Arg Tyr Asp Leu Ala Ser Gly Ala Thr Glu Gln Leu Pro Leu  
770 775 780

Thr Gly Leu Arg Ala Ala Val Ala Leu Asp Phe Asp Tyr Glu His Asn  
785 790 795 800

Cys Leu Tyr Trp Ser Asp Leu Ala Leu Asp Val Ile Gln Arg Leu Cys  
805 810 815

Leu Asn Gly Ser Thr Gly Gln Glu Val Ile Ile Asn Ser Gly Leu Glu  
820 825 830

Thr Val Glu Ala Leu Ala Phe Glu Pro Leu Ser Gln Leu Leu Tyr Trp  
835 840 845

Val Asp Ala Gly Phe Lys Lys Ile Glu Val Ala Asn Pro Asp Gly Asp  
850 855 860

Phe Arg Leu Thr Ile Val Asn Ser Ser Val Leu Asp Arg Pro Arg Ala  
865 870 875 880

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Leu Val Leu Val Pro Gln Glu Gly Val Met Phe Trp Thr Asp Trp Gly  
885 890 895

Asp Leu Lys Pro Gly Ile Tyr Arg Ser Asn Met Asp Gly Ser Ala Ala  
900 905 910

Tyr His Leu Val Ser Glu Asp Val Lys Trp Pro Asn Gly Ile Ser Val  
915 920 925

Asp Asp Gln Trp Ile Tyr Trp Thr Asp Ala Tyr Leu Glu Cys Ile Glu  
930 935 940

Arg Ile Thr Phe Ser Gly Gln Gln Arg Ser Val Ile Leu Asp Asn Leu  
945 950 955 960

Pro His Pro Tyr Ala Ile Ala Val Phe Lys Asn Glu Ile Tyr Trp Asp  
965 970 975

Asp Trp Ser Gln Leu Ser Ile Phe Arg Ala Ser Lys Tyr Ser Gly Ser  
980 985 990

Gln Met Glu Ile Leu Ala Asn Gln Leu Thr Gly Leu Met Asp Met Lys  
995 1000 1005

Ile Phe Tyr Lys Gly Lys Asn Thr Gly Ser Asn Ala Cys Val Pro  
1010 1015 1020

Arg Pro Cys Ser Leu Leu Cys Leu Pro Lys Ala Asn Asn Ser Arg  
1025 1030 1035

Ser Cys Arg Cys Pro Glu Asp Val Ser Ser Ser Val Leu Pro Ser  
1040 1045 1050

Gly Asp Leu Met Cys Asp Cys Pro Gln Gly Tyr Gln Leu Lys Asn  
1055 1060 1065

Asn Thr Cys Val Lys Glu Glu Asn Thr Cys Leu Arg Asn Gln Tyr  
1070 1075 1080

Arg Cys Ser Asn Gly Asn Cys Ile Asn Ser Ile Trp Trp Cys Asp  
1085 1090 1095

Phe Asp Asn Asp Cys Gly Asp Met Ser Asp Glu Arg Asn Cys Pro  
1100 1105 1110

Thr Thr Ile Cys Asp Leu Asp Thr Gln Phe Arg Cys Gln Glu Ser  
1115 1120 1125

Gly Thr Cys Ile Pro Leu Ser Tyr Lys Cys Asp Leu Glu Asp Asp  
1130 1135 1140

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Cys Gly Asp Asn Ser Asp Glu Ser His Cys Glu Met His Gln Cys  
1145 1150 1155

Arg Ser Asp Glu Tyr Asn Cys Ser Ser Gly Met Cys Ile Arg Ser  
1160 1165 1170

Ser Trp Val Cys Asp Gly Asp Asn Asp Cys Arg Asp Trp Ser Asp  
1175 1180 1185

Glu Ala Asn Cys Thr Ala Ile Tyr His Thr Cys Glu Ala Ser Asn  
1190 1195 1200

Phe Gln Cys Arg Asn Gly His Cys Ile Pro Gln Arg Trp Ala Cys  
1205 1210 1215

Asp Gly Asp Thr Asp Cys Gln Asp Gly Ser Asp Glu Asp Pro Val  
1220 1225 1230

Asn Cys Glu Lys Lys Cys Asn Gly Phe Arg Cys Pro Asn Gly Thr  
1235 1240 1245

Cys Ile Pro Ser Ser Lys His Cys Asp Gly Leu Arg Asp Cys Ser  
1250 1255 1260

Asp Gly Ser Asp Glu Gln His Cys Glu Pro Leu Cys Thr His Phe  
1265 1270 1275

Met Asp Phe Val Cys Lys Asn Arg Gln Gln Cys Leu Phe His Ser  
1280 1285 1290

Met Val Cys Asp Gly Ile Ile Gln Cys Arg Asp Gly Ser Asp Glu  
1295 1300 1305

Asp Ala Ala Phe Ala Gly Cys Ser Gln Asp Pro Glu Phe His Lys  
1310 1315 1320

Val Cys Asp Glu Phe Gly Phe Gln Cys Gln Asn Gly Val Cys Ile  
1325 1330 1335

Ser Leu Ile Trp Lys Cys Asp Gly Met Asp Asp Cys Gly Asp Tyr  
1340 1345 1350

Ser Asp Glu Ala Asn Cys Glu Asn Pro Thr Glu Ala Pro Asn Cys  
1355 1360 1365

Ser Arg Tyr Phe Gln Phe Arg Cys Glu Asn Gly His Cys Ile Pro  
1370 1375 1380

Asn Arg Trp Lys Cys Asp Arg Glu Asn Asp Cys Gly Asp Trp Ser  
1385 1390 1395

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Asp Glu Lys Asp Cys Gly Asp Ser His Ile Leu Pro Phe Ser Thr  
1400 1405 1410

Pro Gly Pro Ser Thr Cys Leu Pro Asn Tyr Tyr Arg Cys Ser Ser  
1415 1420 1425

Gly Thr Cys Val Met Asp Thr Trp Val Cys Asp Gly Tyr Arg Asp  
1430 1435 1440

Cys Ala Asp Gly Ser Asp Glu Glu Ala Cys Pro Leu Leu Ala Asn  
1445 1450 1455

Val Thr Ala Ala Ser Thr Pro Thr Gln Leu Gly Arg Cys Asp Arg  
1460 1465 1470

Phe Glu Phe Glu Cys His Gln Pro Lys Thr Cys Ile Pro Asn Trp  
1475 1480 1485

Lys Arg Cys Asp Gly His Gln Asp Cys Gln Asp Gly Arg Asp Glu  
1490 1495 1500

Ala Asn Cys Pro Thr His Ser Thr Leu Thr Cys Met Ser Arg Glu  
1505 1510 1515

Phe Gln Cys Glu Asp Gly Glu Ala Cys Ile Val Leu Ser Glu Arg  
1520 1525 1530

Cys Asp Gly Phe Leu Asp Cys Ser Asp Glu Ser Asp Glu Lys Ala  
1535 1540 1545

Cys Ser Asp Glu Leu Thr Val Tyr Lys Val Gln Asn Leu Gln Trp  
1550 1555 1560

Thr Ala Asp Phe Ser Gly Asp Val Thr Leu Thr Trp Met Arg Pro  
1565 1570 1575

Lys Lys Met Pro Ser Ala Ser Cys Val Tyr Asn Val Tyr Tyr Arg  
1580 1585 1590

Val Val Gly Glu Ser Ile Trp Lys Thr Leu Glu Thr His Ser Asn  
1595 1600 1605

Lys Thr Asn Thr Val Leu Lys Val Leu Lys Pro Asp Thr Thr Tyr  
1610 1615 1620

Gln Val Lys Val Gln Val Gln Cys Leu Ser Lys Ala His Asn Thr  
1625 1630 1635

Asn Asp Phe Val Thr Leu Arg Thr Pro Glu Gly Leu Pro Asp Ala  
1640 1645 1650

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Pro Arg Asn Leu Gln Leu Ser Leu Pro Arg Glu Ala Glu Gly Val  
1655 1660 1665

Ile Val Gly His Trp Ala Pro Pro Ile His Thr His Gly Leu Ile  
1670 1675 1680

Arg Glu Tyr Ile Val Glu Tyr Ser Arg Ser Gly Ser Lys Met Trp  
1685 1690 1695

Ala Ser Gln Arg Ala Ala Ser Asn Phe Thr Glu Ile Lys Asn Leu  
1700 1705 1710

Leu Val Asn Thr Leu Tyr Thr Val Arg Val Ala Ala Val Thr Ser  
1715 1720 1725

Arg Gly Ile Gly Asn Trp Ser Asp Ser Lys Ser Ile Thr Thr Ile  
1730 1735 1740

Lys Gly Lys Val Ile Pro Pro Pro Asp Ile His Ile Asp Ser Tyr  
1745 1750 1755

Gly Glu Asn Tyr Leu Ser Phe Thr Leu Thr Met Glu Ser Asp Ile  
1760 1765 1770

Lys Val Asn Gly Tyr Val Val Asn Leu Phe Trp Ala Phe Asp Thr  
1775 1780 1785

His Lys Gln Glu Arg Arg Thr Leu Asn Phe Arg Gly Ser Ile Leu  
1790 1795 1800

Ser His Lys Val Gly Asn Leu Thr Ala His Thr Ser Tyr Glu Ile  
1805 1810 1815

Ser Ala Trp Ala Lys Thr Asp Leu Gly Asp Ser Pro Leu Ala Phe  
1820 1825 1830

Glu His Val Met Thr Arg Gly Val Arg Pro Pro Ala Pro Ser Leu  
1835 1840 1845

Lys Ala Lys Ala Ile Asn Gln Thr Ala Val Glu Cys Thr Trp Thr  
1850 1855 1860

Gly Pro Arg Asn Val Val Tyr Gly Ile Phe Tyr Ala Thr Ser Phe  
1865 1870 1875

Leu Asp Leu Tyr Arg Asn Pro Lys Ser Leu Thr Thr Ser Leu His  
1880 1885 1890

Asn Lys Thr Val Ile Val Ser Lys Asp Glu Gln Tyr Leu Phe Leu  
1895 1900 1905

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Val Arg Val Val Val Pro Tyr Gln Gly Pro Ser Ser Asp Tyr Val  
1910 1915 1920

Val Val Lys Met Ile Pro Asp Ser Arg Leu Pro Pro Arg His Leu  
1925 1930 1935

His Val Val His Thr Gly Lys Thr Ser Val Val Ile Lys Trp Glu  
1940 1945 1950

Ser Pro Tyr Asp Ser Pro Asp Gln Asp Leu Leu Tyr Ala Ile Ala  
1955 1960 1965

Val Lys Asp Leu Ile Arg Lys Thr Asp Arg Ser Tyr Lys Val Lys  
1970 1975 1980

Ser Arg Asn Ser Thr Val Glu Tyr Thr Leu Asn Lys Leu Glu Pro  
1985 1990 1995

Gly Gly Lys Tyr His Ile Ile Val Gln Leu Gly Asn Met Ser Lys  
2000 2005 2010

Asp Ser Ser Ile Lys Ile Thr Thr Val Ser Leu Ser Ala Pro Asp  
2015 2020 2025

Ala Leu Lys Ile Ile Thr Glu Asn Asp His Val Leu Leu Phe Trp  
2030 2035 2040

Lys Ser Leu Ala Leu Lys Glu Lys His Phe Asn Glu Ser Arg Gly  
2045 2050 2055

Tyr Glu Ile His Met Phe Asp Ser Ala Met Asn Ile Thr Ala Tyr  
2060 2065 2070

Leu Gly Asn Thr Thr Asp Asn Phe Phe Lys Ile Ser Asn Leu Lys  
2075 2080 2085

Met Gly His Asn Tyr Thr Phe Thr Val Gln Ala Arg Cys Leu Phe  
2090 2095 2100

Gly Asn Gln Ile Cys Gly Glu Pro Ala Ile Leu Leu Tyr Asp Glu  
2105 2110 2115

Leu Gly Ser Gly Ala Asp Ala Ser Ala Thr Gln Ala Ala Arg Ser  
2120 2125 2130

Thr Asp Val Ala Ala Val Val Val Pro Ile Leu Phe Leu Ile Leu  
2135 2140 2145

Leu Ser Leu Gly Val Gly Phe Ala Ile Leu Tyr Thr Lys His Arg  
2150 2155 2160

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Arg Leu Gln Ser Ser Phe Thr Ala Phe Ala Asn Ser His Tyr Ser  
2165 2170 2175

Ser Arg Leu Gly Ser Ala Ile Phe Ser Ser Gly Asp Asp Leu Gly  
2180 2185 2190

Glu Asp Asp Glu Asp Ala Pro Met Ile Thr Gly Phe Ser Asp Asp  
2195 2200 2205

Val Pro Met Val Ile Ala  
2210

<210> 3

<211> 1168

<212> PRT

<213> Homo sapiens

<400> 3

Met Gly Lys Val Gly Ala Gly Gly Ser Gln Ala Arg Leu Ser Ala  
1 5 10 15

Leu Leu Ala Gly Ala Gly Leu Leu Ile Leu Cys Ala Pro Gly Val Cys  
20 25 30

Gly Gly Gly Ser Cys Cys Pro Ser Pro His Pro Ser Ser Ala Pro Arg  
35 40 45

Ser Ala Ser Thr Pro Arg Gly Phe Ser His Gln Gly Arg Pro Gly Arg  
50 55 60

Ala Pro Ala Thr Pro Leu Pro Leu Val Val Arg Pro Leu Phe Ser Val  
65 70 75 80

Ala Pro Gly Asp Arg Ala Leu Ser Leu Glu Arg Ala Arg Gly Thr Gly  
85 90 95

Ala Ser Met Ala Val Ala Ala Arg Ser Gly Arg Arg Arg Ser Gly  
100 105 110

Ala Asp Gln Glu Lys Ala Glu Arg Gly Glu Gly Ala Ser Arg Ser Pro  
115 120 125

Arg Gly Val Leu Arg Asp Gly Gly Gln Gln Glu Pro Gly Thr Arg Glu  
130 135 140

Arg Asp Pro Asp Lys Ala Thr Arg Phe Arg Met Glu Glu Leu Arg Leu  
145 150 155 160

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Thr Ser Thr Thr Phe Ala Leu Thr Gly Asp Ser Ala His Asn Gln Ala  
165 170 175

Met Val His Trp Ser Gly His Asn Ser Ser Val Ile Leu Ile Leu Thr  
180 185 190

Lys Leu Tyr Asp Tyr Asn Leu Gly Ser Ile Thr Glu Ser Ser Leu Trp  
195 200 205

Arg Ser Thr Asp Tyr Gly Thr Thr Tyr Glu Lys Leu Asn Asp Lys Val  
210 215 220

Gly Leu Lys Thr Ile Leu Gly Tyr Leu Tyr Val Cys Pro Thr Asn Lys  
225 230 235 240

Arg Lys Ile Met Leu Leu Thr Asp Pro Glu Ile Glu Ser Ser Leu Leu  
245 250 255

Ile Ser Ser Asp Glu Gly Ala Thr Tyr Gln Lys Tyr Arg Leu Asn Phe  
260 265 270

Tyr Ile Gln Ser Leu Leu Phe His Pro Lys Gln Glu Asp Trp Ile Leu  
275 280 285

Ala Tyr Ser Gln Asp Gln Lys Leu Tyr Ser Ser Ala Glu Phe Gly Arg  
290 295 300

Arg Trp Gln Leu Ile Gln Glu Gly Val Val Pro Asn Arg Phe Tyr Trp  
305 310 315 320

Ser Val Met Gly Ser Asn Lys Glu Pro Asp Leu Val His Leu Glu Ala  
325 330 335

Arg Thr Val Asp Gly His Ser His Tyr Leu Thr Cys Arg Met Gln Asn  
340 345 350

Cys Thr Glu Ala Asn Arg Asn Gln Pro Phe Pro Gly Tyr Ile Asp Pro  
355 360 365

Asp Ser Leu Ile Val Gln Asp His Tyr Val Phe Val Gln Leu Thr Ser  
370 375 380

Gly Gly Arg Pro His Tyr Tyr Val Ser Tyr Arg Arg Asn Ala Phe Ala  
385 390 395 400

Gln Met Lys Leu Pro Lys Tyr Ala Leu Pro Lys Asp Met His Val Ile  
405 410 415

Ser Thr Asp Glu Asn Gln Val Phe Ala Ala Val Gln Glu Trp Asn Gln  
420 425 430

SequenceListing ST25.txt

Asn Asp Thr Tyr Asn Leu Tyr Ile Ser Asp Thr Arg Gly Val Tyr Phe  
435 440 445

Thr Leu Ala Leu Glu Asn Val Gln Ser Ser Arg Gly Pro Glu Gly Asn  
450 455 460

Ile Met Ile Asp Leu Tyr Glu Val Ala Gly Ile Lys Gly Met Phe Leu  
465 470 475 480

Ala Asn Lys Lys Ile Asp Tyr Gln Val Lys Thr Phe Ile Thr Tyr Asn  
485 490 495

Lys Gly Arg Asp Trp Arg Leu Leu Gln Ala Pro Asp Thr Asp Leu Arg  
500 505 510

Gly Asp Pro Val His Cys Leu Leu Pro Tyr Cys Ser Leu His Leu His  
515 520 525

Leu Lys Val Ser Glu Asn Pro Tyr Thr Ser Gly Ile Ile Ala Ser Lys  
530 535 540

Asp Thr Ala Pro Ser Ile Ile Val Ala Ser Gly Asn Ile Gly Ser Glu  
545 550 555 560

Leu Ser Asp Thr Asp Ile Ser Met Phe Val Ser Ser Asp Ala Gly Asn  
565 570 575

Thr Trp Arg Gln Ile Phe Glu Glu His Ser Val Leu Tyr Leu Asp  
580 585 590

Gln Gly Gly Val Leu Val Ala Met Lys His Thr Ser Leu Pro Ile Arg  
595 600 605

His Leu Trp Leu Ser Phe Asp Glu Gly Arg Ser Trp Ser Lys Tyr Ser  
610 615 620

Phe Thr Ser Ile Pro Leu Phe Val Asp Gly Val Leu Gly Glu Pro Gly  
625 630 635 640

Glu Glu Thr Leu Ile Met Thr Val Phe Gly His Phe Ser His Arg Ser  
645 650 655

Glu Trp Gln Leu Val Lys Val Asp Tyr Lys Ser Ile Phe Asp Arg Arg  
660 665 670

Cys Ala Glu Glu Asp Tyr Arg Pro Trp Gln Leu His Ser Gln Gly Glu  
675 680 685

Ala Cys Ile Met Gly Ala Lys Arg Ile Tyr Lys Lys Arg Lys Ser Glu  
690 695 700

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Arg Lys Cys Met Gln Gly Lys Tyr Ala Gly Ala Met Glu Ser Glu Pro  
705 710 715 720

Cys Val Cys Thr Glu Ala Asp Phe Asp Cys Asp Tyr Gly Tyr Glu Arg  
725 730 735

His Ser Asn Gly Gln Cys Leu Pro Ala Phe Trp Phe Asn Pro Ser Ser  
740 745 750

Leu Ser Lys Asp Cys Ser Leu Gly Gln Ser Tyr Leu Asn Ser Thr Gly  
755 760 765

Tyr Arg Lys Val Val Ser Asn Asn Cys Thr Asp Gly Val Arg Glu Gln  
770 775 780

Tyr Thr Ala Lys Pro Gln Lys Cys Pro Gly Lys Ala Pro Arg Gly Leu  
785 790 795 800

Arg Ile Val Thr Ala Asp Gly Lys Leu Thr Ala Glu Gln Gly His Asn  
805 810 815

Val Thr Leu Met Val Gln Leu Glu Glu Gly Asp Val Gln Arg Thr Leu  
820 825 830

Ile Gln Val Asp Phe Gly Asp Gly Ile Ala Val Ser Tyr Val Asn Leu  
835 840 845

Ser Ser Met Glu Asp Gly Ile Lys His Val Tyr Gln Asn Val Gly Ile  
850 855 860

Phe Arg Val Thr Val Gln Val Asp Asn Ser Leu Gly Ser Asp Ser Ala  
865 870 875 880

Val Leu Tyr Leu His Val Thr Cys Pro Leu Glu His Val His Leu Ser  
885 890 895

Leu Pro Phe Val Thr Thr Lys Asn Lys Glu Val Asn Ala Thr Ala Val  
900 905 910

Leu Trp Pro Ser Gln Val Gly Thr Leu Thr Tyr Val Trp Trp Tyr Gly  
915 920 925

Asn Asn Thr Glu Pro Leu Ile Thr Leu Glu Gly Ser Ile Ser Phe Arg  
930 935 940

Phe Thr Ser Glu Gly Met Asn Thr Ile Thr Val Gln Val Ser Ala Gly  
945 950 955 960

Asn Ala Ile Leu Gln Asp Thr Lys Thr Ile Ala Val Tyr Glu Glu Phe  
965 970 975

SequenceListing ST25.txt

Arg Ser Leu Arg Leu Ser Phe Ser Pro Asn Leu Asp Asp Tyr Asn Pro  
980 985 990

Asp Ile Pro Glu Trp Arg Arg Asp Ile Gly Arg Val Ile Lys Lys Ser  
995 1000 1005

Leu Val Glu Ala Thr Gly Val Pro Gly Gln His Ile Leu Val Ala  
1010 1015 1020

Val Leu Pro Gly Leu Pro Thr Thr Ala Glu Leu Phe Val Leu Pro  
1025 1030 1035

Tyr Gln Asp Pro Ala Gly Glu Asn Lys Arg Ser Thr Asp Asp Leu  
1040 1045 1050

Glu Gln Ile Ser Glu Leu Leu Ile His Thr Leu Asn Gln Asn Ser  
1055 1060 1065

Val His Phe Glu Leu Lys Pro Gly Val Arg Val Leu Val His Ala  
1070 1075 1080

Ala His Leu Thr Ala Ala Pro Leu Val Asp Leu Thr Pro Thr His  
1085 1090 1095

Ser Gly Ser Ala Met Leu Met Leu Leu Ser Val Val Phe Val Gly  
1100 1105 1110

Leu Ala Val Phe Val Ile Tyr Lys Phe Lys Arg Arg Val Ala Leu  
1115 1120 1125

Pro Ser Pro Pro Ser Pro Ser Thr Gln Pro Gly Asp Ser Ser Leu  
1130 1135 1140

Arg Leu Gln Arg Ala Arg His Ala Thr Pro Pro Ser Thr Pro Lys  
1145 1150 1155

Arg Gly Ser Ala Gly Ala Gln Tyr Ala Ile  
1160 1165

<210> 4

<211> 1222

<212> PRT

<213> Homo sapiens

<400> 4

Met Glu Ala Ala Arg Thr Glu Arg Pro Ala Gly Arg Pro Gly Ala Pro  
1 5 10 15

SequenceListing ST25.txt

Leu Val Arg Thr Gly Leu Leu Leu Ser Thr Trp Val Leu Ala Gly  
20 25 30

Ala Glu Ile Thr Trp Asp Ala Thr Gly Gly Pro Gly Arg Pro Ala Ala  
35 40 45

Pro Ala Ser Arg Pro Pro Ala Leu Ser Pro Leu Ser Pro Arg Ala Val  
50 55 60

Ala Ser Gln Trp Pro Glu Glu Leu Ala Ser Ala Arg Arg Ala Ala Val  
65 70 75 80

Leu Gly Arg Arg Ala Gly Pro Glu Leu Leu Pro Gln Gln Gly Gly  
85 90 95

Arg Gly Gly Glu Met Gln Val Glu Ala Gly Gly Thr Ser Pro Ala Gly  
100 105 110

Glu Arg Arg Gly Arg Gly Ile Pro Ala Pro Ala Lys Leu Gly Gly Ala  
115 120 125

Arg Arg Ser Arg Arg Ala Gln Pro Pro Ile Thr Gln Glu Arg Gly Asp  
130 135 140

Ala Trp Ala Thr Ala Pro Ala Asp Gly Ser Arg Gly Ser Arg Pro Leu  
145 150 155 160

Ala Lys Gly Ser Arg Glu Glu Val Lys Ala Pro Arg Ala Gly Gly Ser  
165 170 175

Ala Ala Glu Asp Leu Arg Leu Pro Ser Thr Ser Phe Ala Leu Thr Gly  
180 185 190

Asp Ser Ala His Asn Gln Ala Met Val His Trp Ser Gly His Asn Ser  
195 200 205

Ser Val Ile Leu Ile Leu Thr Lys Leu Tyr Asp Phe Asn Leu Gly Ser  
210 215 220

Val Thr Glu Ser Ser Leu Trp Arg Ser Thr Asp Tyr Gly Thr Thr Tyr  
225 230 235 240

Glu Lys Leu Asn Asp Lys Val Gly Leu Lys Thr Val Leu Ser Tyr Leu  
245 250 255

Tyr Val Asn Pro Thr Asn Lys Arg Lys Ile Met Leu Leu Ser Asp Pro  
260 265 270

Glu Met Glu Ser Ser Ile Leu Ile Ser Ser Asp Glu Gly Ala Thr Tyr  
275 280 285

SequenceListing ST25.txt

Gln Lys Tyr Arg Leu Thr Phe Tyr Ile Gln Ser Leu Leu Phe His Pro  
290 295 300

Lys Gln Glu Asp Trp Val Leu Ala Tyr Ser Leu Asp Gln Lys Leu Tyr  
305 310 315 320

Ser Ser Met Asp Phe Gly Arg Arg Trp Gln Leu Met His Glu Arg Ile  
325 330 335

Thr Pro Asn Arg Phe Tyr Trp Ser Val Ala Gly Leu Asp Lys Glu Ala  
340 345 350

Asp Leu Val His Met Glu Val Arg Thr Thr Asp Gly Tyr Ala His Tyr  
355 360 365

Leu Thr Cys Arg Ile Gln Glu Cys Ala Glu Thr Thr Arg Ser Gly Pro  
370 375 380

Phe Ala Arg Ser Ile Asp Ile Ser Ser Leu Val Val Gln Asp Glu Tyr  
385 390 395 400

Ile Phe Ile Gln Val Thr Thr Ser Gly Arg Ala Ser Tyr Tyr Val Ser  
405 410 415

Tyr Arg Arg Glu Ala Phe Ala Gln Ile Lys Leu Pro Lys Tyr Ser Leu  
420 425 430

Pro Lys Asp Met His Ile Ile Ser Thr Asp Glu Asn Gln Val Phe Ala  
435 440 445

Ala Val Gln Glu Trp Asn Gln Asn Asp Thr Tyr Asn Leu Tyr Ile Ser  
450 455 460

Asp Thr Arg Gly Ile Tyr Phe Thr Leu Ala Met Glu Asn Ile Lys Ser  
465 470 475 480

Ser Arg Gly Leu Met Gly Asn Ile Ile Glu Leu Tyr Glu Val Ala  
485 490 495

Gly Ile Lys Gly Ile Phe Leu Ala Asn Lys Lys Val Asp Asp Gln Val  
500 505 510

Lys Thr Tyr Ile Thr Tyr Asn Lys Gly Arg Asp Trp Arg Leu Leu Gln  
515 520 525

Ala Pro Asp Val Asp Leu Arg Gly Ser Pro Val His Cys Leu Leu Pro  
530 535 540

Phe Cys Ser Leu His Leu His Leu Gln Leu Ser Glu Asn Pro Tyr Ser  
545 550 555 560

SequenceListing ST25.txt

Ser Gly Arg Ile Ser Ser Lys Glu Thr Ala Pro Gly Leu Val Val Ala  
565 570 575

Thr Gly Asn Ile Gly Pro Glu Leu Ser Tyr Thr Asp Ile Gly Val Phe  
580 585 590

Ile Ser Ser Asp Gly Gly Asn Thr Trp Arg Gln Ile Phe Asp Glu Glu  
595 600 605

Tyr Asn Val Trp Phe Leu Asp Trp Gly Gly Ala Leu Val Ala Met Lys  
610 615 620

His Thr Pro Leu Pro Val Arg His Leu Trp Val Ser Phe Asp Glu Gly  
625 630 635 640

His Ser Trp Asp Lys Tyr Gly Phe Thr Ser Val Pro Leu Phe Val Asp  
645 650 655

Gly Ala Leu Val Glu Ala Gly Met Glu Thr His Ile Met Thr Val Phe  
660 665 670

Gly His Phe Ser Leu Arg Ser Glu Trp Gln Leu Val Lys Val Asp Tyr  
675 680 685

Lys Ser Ile Phe Ser Arg His Cys Thr Lys Glu Asp Tyr Gln Thr Trp  
690 695 700

His Leu Leu Asn Gln Gly Glu Pro Cys Val Met Gly Glu Arg Lys Ile  
705 710 720

Phe Lys Lys Arg Lys Pro Gly Ala Gln Cys Ala Leu Gly Arg Asp His  
725 730 735

Ser Gly Ser Val Val Ser Glu Pro Cys Val Cys Ala Asn Trp Asp Phe  
740 745 750

Glu Cys Asp Tyr Gly Tyr Glu Arg His Gly Glu Ser Gln Cys Val Pro  
755 760 765

Ala Phe Trp Tyr Asn Pro Ala Ser Pro Ser Lys Asp Cys Ser Leu Gly  
770 775 780

Gln Ser Tyr Leu Asn Ser Thr Gly Tyr Arg Arg Ile Val Ser Asn Asn  
785 790 795 800

Cys Thr Asp Gly Leu Arg Glu Lys Tyr Thr Ala Lys Ala Gln Met Cys  
805 810 815

Pro Gly Lys Ala Pro Arg Gly Leu His Val Val Thr Thr Asp Gly Arg  
820 825 830

SequenceListing ST25.txt

Leu Val Ala Glu Gln Gly His Asn Ala Thr Phe Ile Ile Leu Met Glu  
835 840 845

Glu Gly Asp Leu Gln Arg Thr Asn Ile Gln Leu Asp Phe Gly Asp Gly  
850 855 860

Ile Ala Val Ser Tyr Ala Asn Phe Ser Pro Ile Glu Asp Gly Ile Lys  
865 870 875 880

His Val Tyr Lys Ser Ala Gly Ile Phe Gln Val Thr Ala Tyr Ala Glu  
885 890 895

Asn Asn Leu Gly Ser Asp Thr Ala Val Leu Phe Leu His Val Val Cys  
900 905 910

Pro Val Glu His Val His Leu Arg Val Pro Phe Val Ala Ile Arg Asn  
915 920 925

Lys Glu Val Asn Ile Ser Ala Val Val Trp Pro Ser Gln Leu Gly Thr  
930 935 940

Leu Thr Tyr Phe Trp Trp Phe Gly Asn Ser Thr Lys Pro Leu Ile Thr  
945 950 955 960

Leu Asp Ser Ser Ile Ser Phe Thr Phe Leu Ala Glu Gly Thr Asp Thr  
965 970 975

Ile Thr Val Gln Val Ala Ala Gly Asn Ala Leu Ile Gln Asp Thr Lys  
980 985 990

Glu Ile Ala Val His Glu Tyr Phe Gln Ser Gln Leu Leu Ser Phe Ser  
995 1000 1005

Pro Asn Leu Asp Tyr His Asn Pro Asp Ile Pro Glu Trp Arg Lys  
1010 1015 1020

Asp Ile Gly Asn Val Ile Lys Arg Ala Leu Val Lys Val Thr Ser  
1025 1030 1035

Val Pro Glu Asp Gln Ile Leu Ile Ala Val Phe Pro Gly Leu Pro  
1040 1045 1050

Thr Ser Ala Glu Leu Phe Ile Leu Pro Pro Lys Asn Leu Thr Glu  
1055 1060 1065

Arg Arg Lys Gly Asn Glu Gly Asp Leu Glu Gln Ile Val Glu Thr  
1070 1075 1080

Leu Phe Asn Ala Leu Asn Gln Asn Leu Val Gln Phe Glu Leu Lys  
1085 1090 1095

SequenceListing ST25.txt

Pro Gly Val Gln Val Ile Val Tyr Val Thr Gln Leu Thr Leu Ala  
1100 1105 1110

Pro Leu Val Asp Ser Ser Ala Gly His Ser Ser Ser Ala Met Leu  
1115 1120 1125

Met Leu Leu Ser Val Val Phe Val Gly Leu Ala Val Phe Leu Ile  
1130 1135 1140

Tyr Lys Phe Lys Arg Lys Ile Pro Trp Ile Asn Ile Tyr Ala Gln  
1145 1150 1155

Val Gln His Asp Lys Glu Gln Glu Met Ile Gly Ser Val Ser Gln  
1160 1165 1170

Ser Glu Asn Ala Pro Lys Ile Thr Leu Ser Asp Phe Thr Glu Pro  
1175 1180 1185

Glu Glu Leu Leu Asp Lys Glu Leu Asp Thr Arg Val Ile Gly Gly  
1190 1195 1200

Ile Ala Thr Ile Ala Asn Ser Glu Ser Thr Lys Glu Ile Pro Asn  
1205 1210 1215

Cys Thr Ser Val  
1220

<210> 5

<211> 907

<212> PRT

<213> Homo sapiens

<400> 5

Leu Ile Phe His Pro Lys Glu Glu Asp Lys Val Leu Ala Tyr Thr Lys  
1 5 10 15

Glu Ser Lys Leu Tyr Val Ser Ser Asp Leu Gly Lys Lys Trp Thr Leu  
20 25 30

Leu Gln Glu Arg Val Thr Lys Asp His Val Phe Trp Ser Val Ser Gly  
35 40 45

Val Asp Ala Asp Pro Asp Leu Val His Val Glu Ala Gln Asp Leu Gly  
50 55 60

Gly Asp Phe Arg Tyr Val Thr Cys Ala Ile His Asn Cys Ser Glu Lys  
65 70 75 80

SequenceListing ST25.txt

Met Leu Thr Ala Pro Phe Ala Gly Pro Ile Asp His Gly Ser Leu Thr  
85 90 95

Val Gln Asp Asp Tyr Ile Phe Phe Lys Ala Thr Ser Ala Asn Gln Thr  
100 105 110

Lys Tyr Tyr Val Ser Tyr Arg Arg Asn Glu Phe Val Leu Met Lys Leu  
115 120 125

Pro Lys Tyr Ala Leu Pro Lys Asp Leu Gln Ile Ile Ser Thr Asp Glu  
130 135 140

Ser Gln Val Phe Val Ala Val Gln Glu Trp Tyr Gln Met Asp Thr Tyr  
145 150 155 160

Asn Leu Tyr Gln Ser Asp Pro Arg Gly Val Arg Tyr Ala Leu Val Leu  
165 170 175

Gln Asp Val Arg Ser Ser Arg Gln Ala Glu Glu Ser Val Leu Ile Asp  
180 185 190

Ile Leu Glu Val Arg Gly Val Lys Gly Val Phe Leu Ala Asn Gln Lys  
195 200 205

Ile Asp Gly Lys Val Met Thr Leu Ile Thr Tyr Asn Lys Gly Arg Asp  
210 215 220

Trp Asp Tyr Leu Arg Pro Pro Ser Met Asp Met Asn Gly Lys Pro Thr  
225 230 235 240

Asn Cys Lys Pro Pro Asp Cys His Leu His Leu His Leu Arg Trp Ala  
245 250 255

Asp Asn Pro Tyr Val Ser Gly Thr Val His Thr Lys Asp Thr Ala Pro  
260 265 270

Gly Leu Ile Met Gly Ala Gly Asn Leu Gly Ser Gln Leu Val Glu Tyr  
275 280 285

Lys Glu Glu Met Tyr Ile Thr Ser Asp Cys Gly His Thr Trp Arg Gln  
290 295 300

Val Phe Glu Glu Glu His His Ile Leu Tyr Leu Asp His Gly Gly Val  
305 310 315 320

Ile Val Ala Ile Lys Asp Thr Ser Ile Pro Leu Lys Ile Leu Lys Phe  
325 330 335

Ser Val Asp Glu Gly Leu Thr Trp Ser Thr His Asn Phe Thr Ser Thr  
340 345 350

SequenceListing ST25.txt

Ser Val Phe Val Asp Gly Leu Leu Ser Glu Pro Gly Asp Glu Thr Leu  
355 360 365

Val Met Thr Val Phe Gly His Ile Ser Phe Arg Ser Asp Trp Glu Leu  
370 375 380

Val Lys Val Asp Phe Arg Pro Ser Phe Ser Arg Gln Cys Gly Glu Glu  
385 390 395 400

Asp Tyr Ser Ser Trp Glu Leu Ser Asn Leu Gln Gly Asp Arg Cys Ile  
405 410 415

Met Gly Gln Gln Arg Ser Phe Arg Lys Arg Lys Ser Thr Ser Trp Cys  
420 425 430

Ile Lys Gly Arg Ser Phe Thr Ser Ala Leu Thr Ser Arg Val Cys Glu  
435 440 445

Cys Arg Asp Ser Asp Phe Leu Cys Asp Tyr Gly Phe Glu Arg Ser Pro  
450 455 460

Ser Ser Glu Ser Ser Thr Asn Lys Cys Ser Ala Asn Phe Trp Phe Asn  
465 470 475 480

Pro Leu Ser Pro Pro Asp Asp Cys Ala Leu Gly Gln Thr Tyr Thr Ser  
485 490 495

Ser Leu Gly Tyr Arg Lys Val Val Ser Asn Val Cys Glu Gly Gly Val  
500 505 510

Asp Met Gln Gln Ser Gln Val Gln Leu Gln Cys Pro Leu Thr Pro Pro  
515 520 525

Arg Gly Leu Gln Val Ser Ile Gln Gly Glu Ala Val Ala Val Arg Pro  
530 535 540

Gly Glu Asp Val Leu Phe Val Val Arg Gln Glu Gln Gly Asp Val Leu  
545 550 555 560

Thr Thr Lys Tyr Gln Val Asp Leu Gly Asp Gly Phe Lys Ala Met Tyr  
565 570 575

Val Asn Leu Thr Leu Thr Gly Glu Pro Ile Arg His Arg Tyr Glu Ser  
580 585 590

Pro Gly Ile Tyr Arg Val Ser Val Arg Ala Glu Asn Thr Ala Gly His  
595 600 605

Asp Glu Ala Val Leu Phe Val Gln Val Asn Ser Pro Leu Gln Ala Leu  
610 615 620

SequenceListing ST25.txt

Tyr Leu Glu Val Val Pro Val Ile Gly Leu Asn Gln Glu Val Asn Leu  
625 630 635 640

Thr Ala Val Leu Leu Pro Leu Asn Pro Asn Leu Thr Val Phe Tyr Trp  
645 650 655

Trp Ile Gly His Ser Leu Gln Pro Leu Leu Ser Leu Asp Asn Ser Val  
660 665 670

Thr Thr Arg Phe Ser Asp Thr Gly Asp Val Arg Val Thr Val Gln Ala  
675 680 685

Ala Cys Gly Asn Ser Val Leu Gln Asp Ser Arg Val Leu Arg Val Leu  
690 695 700

Asp Gln Phe Gln Val Met Pro Leu Gln Phe Ser Lys Glu Leu Asp Ala  
705 710 715 720

Tyr Asn Pro Asn Thr Pro Glu Trp Arg Glu Asp Val Gly Leu Val Val  
725 730 735

Thr Arg Leu Leu Ser Lys Glu Thr Ser Val Pro Gln Glu Leu Leu Val  
740 745 750

Thr Val Val Lys Pro Gly Leu Pro Thr Leu Ala Asp Leu Tyr Val Leu  
755 760 765

Leu Pro Pro Pro Arg Pro Thr Arg Lys Arg Ser Leu Ser Ser Asp Lys  
770 775 780

Arg Leu Ala Ala Ile Gln Gln Val Leu Asn Ala Gln Lys Ile Ser Phe  
785 790 795 800

Leu Leu Arg Gly Gly Val Arg Val Leu Val Ala Leu Arg Asp Thr Gly  
805 810 815

Thr Gly Ala Glu Gln Leu Gly Gly Gly Gly Tyr Trp Ala Val Val  
820 825 830

Val Leu Phe Val Ile Gly Leu Phe Ala Ala Gly Ala Phe Ile Leu Tyr  
835 840 845

Lys Phe Lys Arg Lys Arg Pro Gly Arg Thr Val Tyr Ala Gln Met His  
850 855 860

Asn Glu Lys Glu Gln Glu Met Thr Ser Pro Val Ser His Ser Glu Asp  
865 870 875 880

Val Gln Gly Ala Val Gln Gly Asn His Ser Gly Val Val Leu Ser Ile  
885 890 895

SequenceListing ST25.txt  
Asn Ser Arg Glu Met His Ser Tyr Leu Val Ser  
900 905

<210> 6

<211> 241

<212> PRT

<213> Homo sapiens

<400> 6

Met Ser Met Leu Phe Tyr Thr Leu Ile Thr Ala Phe Leu Ile Gly Ile  
1 5 10 15

Gln Ala Glu Pro His Ser Glu Ser Asn Val Pro Ala Gly His Thr Ile  
20 25 30

Pro Gln Val His Trp Thr Lys Leu Gln His Ser Leu Asp Thr Ala Leu  
35 40 45

Arg Arg Ala Arg Ser Ala Pro Ala Ala Ala Ile Ala Ala Arg Val Ala  
50 55 60

Gly Gln Thr Arg Asn Ile Thr Val Asp Pro Arg Leu Phe Lys Lys Arg  
65 70 75 80

Arg Leu Arg Ser Pro Arg Val Leu Phe Ser Thr Gln Pro Pro Arg Glu  
85 90 95

Ala Ala Asp Thr Gln Asp Leu Asp Phe Glu Val Gly Gly Ala Ala Pro  
100 105 110

Phe Asn Arg Thr His Arg Ser Lys Arg Ser Ser Ser His Pro Ile Phe  
115 120 125

His Arg Gly Glu Phe Ser Val Cys Asp Ser Val Ser Val Trp Val Gly  
130 135 140

Asp Lys Thr Thr Ala Thr Asp Ile Lys Gly Lys Glu Val Met Val Leu  
145 150 155 160

Gly Glu Val Asn Ile Asn Asn Ser Val Phe Lys Gln Tyr Phe Phe Glu  
165 170 175

Thr Lys Cys Arg Asp Pro Asn Pro Val Asp Ser Gly Cys Arg Gly Ile  
180 185 190

Asp Ser Lys His Trp Asn Ser Tyr Cys Thr Thr Thr His Thr Phe Val  
195 200 205

SequenceListing ST25.txt  
Lys Ala Leu Thr Met Asp Gly Lys Gln Ala Ala Trp Arg Phe Ile Arg  
210 215 220

Ile Asp Thr Ala Cys Val Cys Val Leu Ser Arg Lys Ala Val Arg Arg  
225 230 235 240

Ala

<210> 7

<211> 246

<212> PRT

<213> Homo sapiens

<400> 7

Met Thr Ile Leu Phe Leu Thr Met Val Ile Ser Tyr Phe Gly Cys Met  
1 5 10 15

Lys Ala Ala Pro Met Lys Glu Ala Asn Ile Arg Gly Gln Gly Gly Leu  
20 25 30

Ala Tyr Pro Gly Val Arg Thr His Gly Thr Leu Glu Ser Val Asn Gly  
35 40 45

Pro Lys Ala Gly Ser Gly Leu Thr Ser Leu Ala Asp Thr Phe Glu His  
50 55 60

Val Ile Glu Glu Leu Leu Asp Glu Asp Gln Lys Val Arg Pro Asn Glu  
65 70 75 80

Glu Asn Asn Lys Asp Ala Asp Leu Tyr Thr Ser Arg Val Met Leu Ser  
85 90 95

Ser Gln Val Pro Leu Glu Pro Pro Leu Leu Phe Leu Leu Glu Glu Tyr  
100 105 110

Lys Asn Tyr Leu Asp Ala Ala Asn Met Ser Met Arg Val Arg Arg His  
115 120 125

Ser Asp Pro Ala Arg Arg Gly Glu Leu Ser Val Cys Asp Ser Ile Ser  
130 135 140

Glu Trp Val Thr Ala Ala Asp Lys Lys Thr Ala Val Asp Met Ser Gly  
145 150 155 160

Gly Thr Val Thr Val Leu Glu Lys Val Pro Val Ser Lys Gly Gln Leu  
165 170 175

SequenceListing ST25.txt

Lys Gln Tyr Phe Tyr Glu Thr Lys Cys Asn Pro Met Gly Tyr Thr Lys  
180 185 190

Glu Gly Cys Arg Gly Ile Asp Lys Arg His Trp Asn Ser Gln Cys Arg  
195 200 205

Thr Thr Gln Ser Tyr Val Arg Ala Leu Thr Met Asp Ser Lys Lys Arg  
210 215 220

Ile Gly Trp Arg Phe Ile Arg Ile Asp Thr Ser Cys Val Cys Thr Leu  
225 230 235 240

Thr Ile Lys Arg Gly Arg  
245

<210> 8

<211> 257

<212> PRT

<213> Homo sapiens

<400> 8

Met Ser Ile Leu Phe Tyr Val Ile Phe Leu Ala Tyr Leu Arg Gly Ile  
1 5 10 15

Gln Gly Asn Asn Met Asp Gln Arg Ser Leu Pro Glu Asp Ser Leu Asn  
20 25 30

Ser Leu Ile Ile Lys Leu Ile Gln Ala Asp Ile Leu Lys Asn Lys Leu  
35 40 45

Ser Lys Gln Met Val Asp Val Lys Glu Asn Tyr Gln Ser Thr Leu Pro  
50 55 60

Lys Ala Glu Ala Pro Arg Glu Pro Glu Arg Gly Gly Pro Ala Lys Ser  
65 70 75 80

Ala Phe Gln Pro Val Ile Ala Met Asp Thr Glu Leu Leu Arg Gln Gln  
85 90 95

Arg Arg Tyr Asn Ser Pro Arg Val Leu Leu Ser Asp Ser Thr Pro Leu  
100 105 110

Glu Pro Pro Pro Leu Tyr Leu Met Glu Asp Tyr Val Gly Ser Pro Val  
115 120 125

Val Ala Asn Arg Thr Ser Arg Arg Lys Arg Tyr Ala Glu His Lys Ser  
130 135 140

SequenceListing ST25.txt

His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Ser Leu Trp Val Thr  
145 150 155 160

Asp Lys Ser Ser Ala Ile Asp Ile Arg Gly His Gln Val Thr Val Leu  
165 170 175

Gly Glu Ile Lys Thr Gly Asn Ser Pro Val Lys Gln Tyr Phe Tyr Glu  
180 185 190

Thr Arg Cys Lys Glu Ala Arg Pro Val Lys Asn Gly Cys Arg Gly Ile  
195 200 205

Asp Asp Lys His Trp Asn Ser Gln Cys Lys Thr Ser Gln Thr Tyr Val  
210 215 220

Arg Ala Leu Thr Ser Glu Asn Asn Lys Leu Val Gly Trp Arg Trp Ile  
225 230 235 240

Arg Ile Asp Thr Ser Cys Val Cys Ala Leu Ser Arg Lys Ile Gly Arg  
245 250 255

Thr

<210> 9

<211> 210

<212> PRT

<213> Homo sapiens

<400> 9

Met Leu Pro Leu Pro Ser Cys Ser Leu Pro Ile Leu Leu Leu Phe Leu  
1 5 10 15

Leu Pro Ser Val Pro Ile Glu Ser Gln Pro Pro Pro Ser Thr Leu Pro  
20 25 30

Pro Phe Leu Ala Pro Glu Trp Asp Leu Leu Ser Pro Arg Val Val Leu  
35 40 45

Ser Arg Gly Ala Pro Ala Gly Pro Pro Leu Leu Phe Leu Leu Glu Ala  
50 55 60

Gly Ala Phe Arg Glu Ser Ala Gly Ala Pro Ala Asn Arg Ser Arg Arg  
65 70 75 80

Gly Val Ser Glu Thr Ala Pro Ala Ser Arg Arg Gly Glu Leu Ala Val  
85 90 95

SequenceListing ST25.txt

Cys Asp Ala Val Ser Gly Trp Val Thr Asp Arg Arg Thr Ala Val Asp  
100 105 110

Leu Arg Gly Arg Glu Val Glu Val Leu Gly Glu Val Pro Ala Ala Gly  
115 120 125

Gly Ser Pro Leu Arg Gln Tyr Phe Phe Glu Thr Arg Cys Lys Ala Asp  
130 135 140

Asn Ala Glu Glu Gly Gly Pro Gly Ala Gly Gly Gly Cys Arg Gly  
145 150 155 160

Val Asp Arg Arg His Trp Val Ser Glu Cys Lys Ala Lys Gln Ser Tyr  
165 170 175

Val Arg Ala Leu Thr Ala Asp Ala Gln Gly Arg Val Gly Trp Arg Trp  
180 185 190

Ile Arg Ile Asp Thr Ala Cys Val Cys Thr Leu Leu Ser Arg Thr Gly  
195 200 205

Arg Ala  
210

<210> 10

<211> 13

<212> PRT

<213> Homo sapiens

<400> 10

Gln Leu Tyr Glu Asn Lys Pro Arg Arg Pro Tyr Ile Leu  
1 5 10

<210> 11

<211> 5

<212> PRT

<213> Homo sapiens

<400> 11

Ile Pro Tyr Ile Leu  
1 5

<210> 12

<211> 357

SequenceListing ST25.txt

<212> PRT

<213> Homo sapiens

<400> 12

Met Ala Pro Arg Arg Val Arg Ser Phe Leu Arg Gly Leu Pro Ala Leu  
1 5 10 15

Leu Leu Leu Leu Leu Phe Leu Gly Pro Trp Pro Ala Ala Ser His Gly  
20 25 30

Gly Lys Tyr Ser Arg Glu Lys Asn Gln Pro Lys Pro Ser Pro Lys Arg  
35 40 45

Glu Ser Gly Glu Glu Phe Arg Met Glu Lys Leu Asn Gln Leu Trp Glu  
50 55 60

Lys Ala Gln Arg Leu His Leu Pro Pro Val Arg Leu Ala Glu Leu His  
65 70 75 80

Ala Asp Leu Lys Ile Gln Glu Arg Asp Glu Leu Ala Trp Lys Lys Leu  
85 90 95

Lys Leu Asp Gly Leu Asp Glu Asp Gly Glu Lys Glu Ala Arg Leu Ile  
100 105 110

Arg Asn Leu Asn Val Ile Leu Ala Lys Tyr Gly Leu Asp Gly Lys Lys  
115 120 125

Asp Ala Arg Gln Val Thr Ser Asn Ser Leu Ser Gly Thr Gln Glu Asp  
130 135 140

Gly Leu Asp Asp Pro Arg Leu Glu Lys Leu Trp His Lys Ala Lys Thr  
145 150 155 160

Ser Gly Lys Phe Ser Gly Glu Glu Leu Asp Lys Leu Trp Arg Glu Phe  
165 170 175

Leu His His Lys Glu Lys Val His Glu Tyr Asn Val Leu Leu Glu Thr  
180 185 190

Leu Ser Arg Thr Glu Glu Ile His Glu Asn Val Ile Ser Pro Ser Asp  
195 200 205

Leu Ser Asp Ile Lys Gly Ser Val Leu His Ser Arg His Thr Glu Leu  
210 215 220

Lys Glu Lys Leu Arg Ser Ile Asn Gln Gly Leu Asp Arg Leu Arg Arg  
225 230 235 240

SequenceListing ST25.txt

val ser His Gln Gly Tyr Ser Thr Glu Ala Glu Phe Glu Glu Pro Arg  
245 250 255

val Ile Asp Leu Trp Asp Leu Ala Gln Ser Ala Asn Leu Thr Asp Lys  
260 265 270

Glu Leu Glu Ala Phe Arg Glu Glu Leu Lys His Phe Glu Ala Lys Ile  
275 280 285

Glu Lys His Asn His Tyr Gln Lys Gln Leu Glu Ile Ala His Glu Lys  
290 295 300

Leu Arg His Ala Glu Ser Val Gly Asp Gly Glu Arg Val Ser Arg Ser  
305 310 315 320

Arg Glu Lys His Ala Leu Leu Glu Gly Arg Thr Lys Glu Leu Gly Tyr  
325 330 335

Thr Val Lys Lys His Leu Gln Asp Leu Ser Gly Arg Ile Ser Arg Ala  
340 345 350

Arg His Asn Glu Leu  
355

<210> 13

<211> 170

<212> PRT

<213> Homo sapiens

<400> 13

Met Met Ala Gly Met Lys Ile Gln Leu Val Cys Met Leu Leu Leu Ala  
1 5 10 15

Phe Ser Ser Trp Ser Leu Cys Ser Asp Ser Glu Glu Glu Met Lys Ala  
20 25 30

Leu Glu Ala Asp Phe Leu Thr Asn Met His Thr Ser Lys Ile Ser Lys  
35 40 45

Ala His Val Pro Ser Trp Lys Met Thr Leu Leu Asn Val Cys Ser Leu  
50 55 60

Val Asn Asn Leu Asn Ser Pro Ala Glu Glu Thr Gly Glu Val His Glu  
65 70 75 80

Glu Glu Leu Val Ala Arg Arg Lys Leu Pro Thr Ala Leu Asp Gly Phe  
85 90 95

SequenceListing ST25.txt

Ser Leu Glu Ala Met Leu Thr Ile Tyr Gln Leu His Lys Ile Cys His  
100 105 110

Ser Arg Ala Phe Gln His Trp Glu Leu Ile Gln Glu Asp Ile Leu Asp  
115 120 125

Thr Gly Asn Asp Lys Asn Gly Lys Glu Glu Val Ile Lys Arg Lys Ile  
130 135 140

Pro Tyr Ile Leu Lys Arg Gln Leu Tyr Glu Asn Lys Pro Arg Arg Pro  
145 150 155 160

Tyr Ile Leu Lys Arg Asp Ser Tyr Tyr Tyr  
165 170